

# OFFICE MEMORANDUM

**DATE:** November 6, 2003

**TO:** Region Engineers

Region Delivery Engineers

TSC Managers

Region Construction Engineers
Resident/Project Engineers

**FROM:** Larry E. Tibbits

**Chief Operations Officer** 

John C. Friend Engineer of Delivery

**SUBJECT:** Bureau of Highway Instructional Memorandum 2003-15

C&T Support Area Procedures Manuals - 2003 Annual Updates

The Construction and Technology Support Area has reviewed and made revisions to the procedures manuals listed below. Questions concerning these revisions or the schedule of future revisions may be directed to Judy Ruszkowski, Engineer of Specifications, at <a href="mailto:ruszkowskij@michigan.gov">ruszkowskij@michigan.gov</a>. All holders of record on file with the MDOT Publications Office will receive copies of the listed additions and revisions to the Construction Manual and Materials Quality Assurance Manual. All holders of record for the Procedures Manual for HMA Mix Design Processing will receive the new combined HMA Procedures Manual. The new Bridge Manuals will be made available through the MDOT Publications Office.

Current copies of all C&T manuals, including revisions, may be ordered through the Publications Office at 517-322-1676 or by sending an email request to MDOT-Publications@michigan.gov. C&T intends to have all of the bridge and materials procedures manuals available on the MDOT web site by the end of the year. Printed copies will continue to be available through the Publications Office and annual updates will be made via this instructional memorandum process.

#### Michigan Structure Inventory and Appraisal Coding Guide (NEW)

The Michigan Structure Inventory and Appraisal Coding Guide (Coding Guide) has recently been reissued. This 2003 edition replaces the Coding Guide dated January 1997. The old guide should be discarded. The Coding Guide has been revised to reflect the conversion of measurement based data Items to the English units.

## HMA Production Manual (NEW)

The Procedures Manual for Mix Design Processing, the Manual for Certification of HMA Plants and the HMA QC/QA Procedures Manual of Field Testing, have been combined into this single manual to reduce the cost of printing and distribution and to make revisions easier to track.

Part 1: HMA Mix Design Processing has been revised to reflect changes made in the MDOT HMA Quality Assurance Program. No changes were made in the content of Part 2: Certification of HMA Plants or Part 3: HMA QC/QA Field Testing Procedures.

#### Density Control Handbook

The Density Control Handbook has been completely revised to reflect changes in the Standard Specifications for Construction. This 2003 version replaces all previous versions of the Density Control Handbook. Dual units are used in this manual whenever practical.

#### **Construction Manual**

Section 110 Programs Not Covered by Standard Specifications

Reorganized to better reflect individual programs. No change to technical content.

Section 208 Part 4. Winter Shutdown

This section has been revised based on input from the regions.

#### Materials Quality Assurance Manual

- Part A1 Scope and Objectives of the Quality Assurance Program
  Revised to reflect changes to the Materials QA Program by implementation of the
  Materials Testing System. Updated references to Code of Federal Regulations
  requiring the Materials QA Program at MDOT
- Part A2 Responsibilities of Personnel Revised to address direct responsibilities of Engineer of C&T and C&T Support Area staff for administering the Materials QA Program.
- Part A4 Disposition of Materials Based on Laboratory Test Results
  Revised to reflect changes to the Materials QA Program brought about by
  implementation of the Materials Testing System. Content and distribution of test
  reports by the new software application is discussed.
- Part A8 Resampling

Revised to reflect changes to the Materials QA Program by implementation of the Materials Testing System. Content and distribution of test reports by the new software application is discussed.

- Part C1 General Materials Certification Procedure for Approved Manufacturer/Supplier Status
  Corrected section reference in Section 3.4 from "Section 3.2" to "Section 3.3."
- Part C7 Certification Procedure for Asphalt Binder
  Deleted section 4.1 requiring annual asphalt binder testing samples and limit the
  submission period for obtaining certification privileges to November through April.

## Part C8 Certification Procedures for Emulsified Asphalt

Revised to follow the format of Section C7 and to better reflect the current procedures. No changes were made in the emulsified asphalt certification program requirements.

#### Part F Qualified Products Evaluation Procedures

Several evaluation procedures have been revised to correct section references in the 2003 Standard Specifications for Construction and to reflect changes in the contact person at C&T. Unless specifically noted herein, there are no significant changes in the procedures themselves.

Reindexed F603.02C to F603.03B2 Grout for Full-Depth Concrete Pavement Repairs to correspond to the 2003 Standard Specifications for Construction.

Reindexed F702.03B1 to F702.02B Non-Shrinking Mortar and Grout, Premixed, Type H-1 (Non-Metallic) to correspond to the 2003 Standard Specifications for Construction.

Reindexed F703.03A to F703.02B-SP Prepackaged Hydraulic Fast-Set Materials for Patching Structural Concrete to indicate that this Qualified Product List is for a Special Provision material and is not covered in the 2003 Standard Specifications for Construction.

Reindexed F706.03T1 to F706.03S Penetrating Water Repellent Treatment for Structural Concrete Surfaces to correspond to the 2003 Standard Specifications for Construction. The manufacturer must have all testing completed by an independent laboratory and submit results with application.

Revised F713.02B1 Sealant for Perimeter of Beam Plates to require polyurethane material packaged in cartridge form.

Revised F909.08C Bridge Deck Drain Extensions to require manufacturer to submit documentation of physical requirements and to certify that test data was obtained according to the QPL procedures.

Revised F912.09Q Recycled Rubber/Plastic Offset Blocks for Guardrail with Steel Posts - The title is changed to reflect use on steel posts only.

Deleted F914.04B Backer Rod for Use with Hot Poured Joint Sealant - This material specification is now in the standard specifications.

Reindexed F914.07 to F914.06 Epoxy Resin Adhesive to correspond to the 2003 Standard Specifications for Construction and revised to require manufacturer to submit documentation of physical requirements and to certify that test data was obtained according to the QPL procedures.

Reindexed F914.08Aiii to F914.07A Coatings for Dowel Bars, Bond Release Agent to correspond to the 2003 Standard Specifications for Construction and revised to require manufacturer to submit documentation of physical requirements and to certify that test data was obtained according to the QPL procedures.

## Part G Materials Acceptance Criteria

This section has been revised to correct section references in the 2003 Standard Specifications for Construction and to revise the basis of acceptance for the materials listed here.

Specification Reference	Material Name	Basis of Acceptance	Reason for Change
907.03	Woven Wire Fence Materials A. Woven Wire B. Barbed Wire C. Smooth Wire D. Steel Posts	Gen Cert changed to VI	Non-critical material with good record of meeting specifications and performance criteria.
908.14	Reflective Washers	Field Inspection changed to VI	The term Field Inspection implies an inspection procedure and report form.
909.03	Gasket, Compression (O-Rings)	Gen Cert changed to VI	Gasket is part of Watertight Joint System (QPL)
909.05	Gasket, External Rubber Type	Gen Cert changed to VI	Gasket is part of Watertight Joint System (QPL)

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### **Chief Operations Officer**

**Engineer of Delivery** 

MAPA

BOHD:C/T:JAR:kab

Index: Procedures Manuals cc: C & T Support Area Staff

Real Estate Support Area, M. DeLong Design Support Area, M. VanPortfleet Maintenance Support Area, C. Roberts Traffic & Safety Support Area, J. Culp C & T Support Area, B. O'Brien

OEO - S. El Ahmad

T. Fudaly, FHWA
C. Rademacher
V. Blaxton
G. Moore
K. Reincke
MRBA

MCPA CRAM
MCA MRPA
MAA ACEC
AUC MPA